# Statement of Basis
for
Modification of Permit No. ST 6185
Toyocom Devices of America, Inc., Longview, WA.
February 2003

Ecology issued Toyocom's first permit on July 31, 2002 and it became effective September 1, 2002. In correspondence received February 10, 2003, Toyocom requested a permit modification to increase the allowable daily discharge limit to 10,000 gallons per day. The current discharge limit is 7000 gallons per day.

After a batch of crystals has been grown and harvested, spent autoclave wastewater is released to the holding tank. This high pH wastewater is transferred to the treatment tank in increments of 1000 gallons. About 6000 gallons of city water is added to partially neutralize the spent autoclave wastewater, and then acid is added to complete the neutralization and achieve compliance with the permit's pH limits. Sometimes the total volume of neutralized wastewater is greater than 7000 gallons. At times, Toyocom needs to discharge the contents of the treatment tank in a one-day shift, to be ready to begin neutralization of a second batch the next day. This need will increase even more when the second set of four autoclaves come on line, later this year.

The increased limits are necessary to allow efficient operation of Toyocom's manufacture of quartz crystals, especially with the increased production from the four new autoclaves. The four new autoclaves were factored into the consideration of this current permit, and therefore their addition does not trigger the need for a permit modification request or an addendum to the engineering report.

Ecology believes that the increased discharge limits will not cause any downstream concerns, in either the collection system or the Cowlitz Water Pollution Control treatment plant. Toyocom continues to use their initial inventory of sulfuric acid for neutralization, with about one-third of the supply remaining. When this current inventory is depleted, the permit requires Toyocom to switch to a different acid for neutralization, due to concern of possible hydrogen sulfide gas that could form in the collection system.